

IN THE CLAIMS

1. (original) A communications apparatus for switching among different interfaces and comprising a switch unit, the switch unit comprising:

a main switch for switching data of a fixed length; and

an interface having a first buffer for an input of the main switch and a second buffer for an output of the main switch.

2. (original) The communications apparatus as claimed in claim 1, wherein the communications apparatus further comprises a processor that is connected to the switch unit and processes data according to a predetermined protocol, the processor having a third buffer and a fourth buffer connected to the first buffer and the second buffer, the processor performing back pressure control on the third buffer when the first buffer assumes a predetermined state.

3. (original) The communications apparatus as claimed in claim 1, wherein the communications apparatus further comprises a processor that is connected to the switch unit and processes data according to a predetermined protocol, the processor having a third buffer and a fourth buffer connected to the first buffer and the second buffer, the processor performing back pressure control on the first buffer when the fourth buffer assumes a predetermined state.

4. (currently amended) The communications apparatus as claimed in claim 1, wherein [[the]] a processor performs back pressure control on the first buffer when the second buffer assumes a predetermined state.

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5. (original) The communications apparatus as claimed in claim 1, wherein the communications apparatus further comprises a processor that is connected to the switch unit and processes data according to a predetermined protocol, the processor having a third buffer and a fourth buffer connected to the first buffer and the second buffer, the processor performing back pressure control on the fourth buffer when receiving a request for back pressure control from an apparatus that is connected to the processor.

6. (original) The communications apparatus as claimed in claim 2, wherein the back pressure control request is formed by a predetermined flow control cell.

7. (original) The communications apparatus as claimed in claim 3, wherein the back pressure control request is formed by a predetermined flow control cell.

8. (original) The communications apparatus as claimed in claim 4, wherein the back pressure control request is formed by a predetermined flow control cell.

9. (original) The communications apparatus as claimed in claim 2, wherein the back pressure control is performed by predetermined Quality of Service (QoS) class units.

10. (original) The communications apparatus as claimed in claim 3, wherein the back pressure control is performed by predetermined Quality of Service (QoS) class units.

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11. (original) The communications apparatus as claimed in claim 4, wherein the back pressure control is performed by predetermined Quality of Service (QoS) class units.

12. (original) The communications apparatus as claimed in claim 5, wherein the back pressure control is performed by predetermined Quality of Service (QoS) class units.

13. (original) The communications apparatus as claimed in claim 2, wherein back pressure control is performed in circuit units.

14. (original) The communications apparatus as claimed in claim 3, wherein back pressure control is performed in circuit units.

15. (original) The communications apparatus as claimed in claim 4, wherein back pressure control is performed in circuit units.

16. (original) The communications apparatus as claimed in claim 5, wherein back pressure control is performed in circuit units.

17. (original) The communications apparatus as claimed in claim 2, wherein the predetermined state is determined at predetermined QoS class units.

18. (original) The communications apparatus as claimed in claim 3, wherein the predetermined state is determined at predetermined QoS class units.

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19. (original) The communications apparatus as claimed in claim 4, wherein the predetermined state is determined at predetermined QoS class units.

20. (original) The communications apparatus as claimed in claim 2, wherein the predetermined state is determined at circuit units.

21. (original) The communications apparatus as claimed in claim 3, wherein the predetermined state is determined at circuit units.

22. (original) The communications apparatus as claimed in claim 4, wherein the predetermined state is determined at circuit units.

23. (original) The communications apparatus as claimed in claim 2, wherein the processor has a local switch that supplies data received from the switch unit to an internal buffer corresponding to the appropriate circuit.

24. (original) The communications apparatus as claimed in claim 2, wherein:
the processor has a local switch equipped with a buffer that temporarily stores data received from the switch unit; and
the local switch itself has another local switch that reads the data from the buffer and supplies the data so read to an internal buffer of the appropriate circuit.

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25. (original) The communications apparatus as claimed in claim 12, wherein a terminal unit is provided between the processor and the circuits, the terminal unit comprising:

- a buffer provided at each circuit; and
- a buffer capacity monitor that monitors a capacity of the buffer and controls the buffer so as to temporarily store data received from the switch unit.

26. (original) The communications apparatus as claimed in claim 1, wherein:

- the switch unit is multiplexed; and
- a working system receiving a back pressure control request from a passive system discards that back pressure control request.

27. (original) A communications apparatus for switching among different interfaces and comprising a plurality of switch units, each switch unit comprising:

- a main switch for switching data of a fixed length; and
- an interface having a first buffer for an input of the main switch and a second buffer for an output of the main switch provided on each circuit.

28. (original) The communications apparatus as claimed in claim 15, further comprising:

- a plurality of processors connected to the switch unit for performing processes according to a predetermined protocol; and
- a bus for transmitting a predetermined back pressure control signal to the plurality of processors.

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29. (original) The communications apparatus as claimed in claim 16, wherein each one of the plurality of switch units receives a back pressure control signal and controls a flow of information from the first buffer.

30. (original) A communications control method for switching among different interfaces, comprising the steps of:

switching data handled by the different interfaces after once buffering data of a fixed length related to the data handled by the different interfaces; and

sending the switched data to the circuits after once buffering the switched data.

31. (currently amended) The communications control method as claimed in claim [[18]] 30, further comprising the step of:

bypassing the switching of data and sending the back pressure control request to another apparatus when the buffering assumes a predetermined state prior to switching.

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